

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:

"14" in figure 2.

"15" in figure 3.

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

2. The following represents the proper format for a specification.

#### **Content of Specification**

(a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the

specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.

- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems

previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

- (I) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

In the present application, the specification lacks headings for the different sections and does not include a brief description of the drawings.

3. The specification is also objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Correction of the following is required: The specification does not provide proper antecedent basis for the limitations of previous claim 10 and the similar limitations now added to claim 8. There is no discussion in the specification about the angular spacing between the melt passage and the cutout. Figure 1 also does not show the angular spacing between the melt passage and cutout to be as claimed.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 8 and 11 - 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed,

had possession of the claimed invention. The limitation "an angular spacing between the passage where it passes though the wheel and the cutout being at least equal to the angular filter-element width plus an angular dimension of one of the spokes and at most equal to twice the angular filter-element width plus an angular dimension of one of the spokes" has been added to claim 8. As noted above the specification does not provide support for this limitation. Previous claim 10 included a similar limitation; however, the angular spacing between the passage and the cutout was recited to be at most equal to twice the angular filter-element width. Previous claim 10 does not provide support for the angular spacing to be at most equal to twice the angular filter-element width plus an angular dimension of one of the spokes. Claims 11 - 14 depend from claim 8 and are also rejected.

6. Claim 8 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

7. Claim 8 recites the limitation "the passage" in line 14 of the claim. There is insufficient antecedent basis for this limitation in the claim. The examiner believes "the passage" should be --the melt passage-- and has considered it as such.

***Claim Rejections - 35 USC § 103***

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 8 and 11 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schaller (US 6,325,922).

In regard to claim 8, Schaller teaches a melt filter for cleaning a plastic melt issuing from an extruder, the filter comprising a wheel (1) rotatable about an axis and having an outer rim and a plurality of spokes forming an annular array of axially open spaces (cavities 2, Fig 1a); a pair of housing plates (blocks 40, 41, Fig 3) axially sandwiching and completely covering the wheel and forming offset from the axis a melt passage extending axially through the wheel at the spaces; removable filter elements (43, Fig 2) braced axially against the wheel at the spaces between the spokes, one of the plates being formed with an edge cutout (opening 29, Fig 2) of a dimension greater than an angular width of one of the filter elements and smaller or equal to twice this angular width, whereby filter elements can be removed from the wheel at the cutout; and a ratchet drive (20, Fig 2) engaging the rim and operable to angularly move the wheel about the axis in steps, wherein the one housing plate has a part that can cover and close (Col 6, lines 62-64) the cutout during normal operation of the melt filter and that can open and uncover the cutout for changing a filter element.

Schaller does not distinctly disclose the angular spacing between the melt passage and the cutout (29). Thus, Schaller does not disclose an angular spacing between the melt passage where it passes through the disk and the cutout is at least equal to the angular filter-element width element plus an angular dimension of one of the spokes and at most equal to twice the angular filter-element width plus an angular dimension of one of the spokes. There is no evidence, however, that the angular

spacing between the melt passage and the cutout in Schaller is critical. Predictably the melt passage and cutout could be located anywhere around a plate that allows for the easiest access and connection of lines to the filter.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Schaller to provide an angular spacing between the melt passage where it passes through the disk and the cutout is at least equal to the angular filter-element width element plus an angular dimension of one of the spokes and at most equal to twice the angular filter-element width plus an angular dimension of one of the spokes given this dimension allows for the easiest access and connection of lines to the filter. Where patentability is said to be based upon particular chosen dimensions or upon another variable recited in the claim, the applicant must show that the chosen dimensions are critical, see *In re Woodruff*, 16 USPQ2d 1934.

Regarding Claims 11 - 14, Schaller does not explicitly teach an area of the disk through which the melt flows is between 12% and 18% of a total area of the disk, wherein an area of the disk through which the melt flows is between 14% and 16% of a total area of the disk, wherein each step of the disk exposes a fresh area of the filter disk equal to at most 10% of a total area of the disk, or wherein each step of the disk exposes a fresh area of the filter disk equal to between 6% and 7% of a total area of the disk.

However, "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). The discovery of

an optimum value of a known result effective variable, without producing any new or unexpected results, is within the ambit of a person of ordinary skill in the art. See *In re Boesch*, 205 USPQ 215 (CCPA 1980) (see MPEP § 2144.05, II.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to carry out the experimentation necessary to determine the optimum ranges of exchanging area needed.

#### ***Response to Arguments***

10. Applicant's arguments filed July 28, 2011 have been fully considered but they are not persuasive.

The examiner generally agrees with Applicant's arguments that Schaller does not clearly show the angular spacing between the melt passage and the cutout, and Thus does not teach an angular spacing between the melt passage where it passes through the disk and the cutout is at least equal to the angular filter-element width element plus an angular dimension of one of the spokes and at most equal to twice the angular filter-element width plus an angular dimension of one of the spokes. There is no evidence, however, that the melt passage must be diametrically opposite the cutout or that the angular spacing between the melt passage and the cutout in Schaller is critical.

Predictably the cutout could be positioned anywhere around the plate to allow a user the easiest access to the cutout. Similarly, the melt passage predictably could be arranged anywhere around the plate to allow external lines the easiest connection to the filter. Thus, the examiner considers it to have been obvious to one of ordinary skill in the

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art at the time of the invention to modify Schaller to provide an angular spacing between the melt passage where it passes through the disk and the cutout is at least equal to the angular filter-element width element plus an angular dimension of one of the spokes and at most equal to twice the angular filter-element width plus an angular dimension of one of the spokes given this dimension allows for the easiest access and connection of lines to the filter.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT CLEMENTE whose telephone number is (571)272-1476. The examiner can normally be reached on M-F, 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert Clemente/  
Primary Examiner, Art Unit 1776